Art. VI. *Successful Ligature of the Subclavian Artery.* By G. H. White, M. D., of Hudson, New York.

On the evening of the 3d day of last September, a rencontre took place between Mr. Taylor, a stout muscular young man, residing in Saugerties, Ulster County, New York, and one of his neighbours. In this affray Mr. T. received a stab forward of the left shoulder, which wounded the upper portion of the axillary artery, and nearly terminated his life before surgical aid could be obtained. The hæmorrhage, however, was arrested by strong compression.

On the 4th day after the occurrence, it was evident that an aneurismal tumour was forming, but from the extreme tenderness and swollen state of the parts adjacent, some delay was deemed essential to the safe performance of so intricate an operation as would be requisite in his case.

On the 17th of September, just two weeks from the time of the injury, the tumefaction having subsided, a large pulsating tumour presented itself, pressing hard against the clavicle, and on the point of bursting. The patient was now placed upon a suitable table, with the head and shoulders somewhat elevated, under strong light, when, assisted by my father, Dr. S. White, and Drs. W. C. and A. B. De Witt, I proceeded to the operation of dissecting down, above the clavicle, and tying the subclavian artery, at the point where it emerges from between the scaleni muscles. The shoulder being much elevated by the pressure of the tumour, he drew the skin firmly down and commenced the first incision about one inch from the sternal end, extending it three inches on the upper margin of the clavicle, thus dividing the skin and platisma myoides. From the inner point of this incision, one of an inch and a half was made on the outer edge of the mastoid muscle. This triangular flap being raised, the further dissection was completed without wounding any important muscle, till the artery was exposed, lying nearly under one of the large cervical nerves. A silk ligature was now passed under the subclavian, with the Philadelphia needle, and the artery was firmly tied, when all pulsation in the tumour ceased. One small artery required a ligature during the dissection, with the loss of about four ounces of blood. The wound was closed with sutures and adhesive straps. The pressure being great upon the tumour, a puncture was made with a lancet, and a small portion of the coagulated blood suffered to escape, to the great relief of the patient.

On the 4th day after the operation the pulse returned at the wrist. In one week the tumour had nearly subsided. On the 17th day, the ligature came away; and in three weeks the wounds were healed, and the patient was restored.

When we call to mind that it is but twenty-one years since the operation of tying the subclavian artery, in this or any other country, was first successfully performed, by the late Dr. Post of New York; and consider the many difficulties attending this case; in the language of the attending physicians, it may be pronounced, "a splendid triumph of surgery over disease and impending death."

Hudson, December 1st, 1838.

ART. VII. *Contributions Illustrative of the Functions of the Cerebellum.*

By JOHN D. FISHER, M. D., of Boston.

SOME of the facts stated in the following communication have a bearing on the physiology of the cerebellum.

The office which this portion of the encephalon performs in the animal economy, has of late years engaged the attention of physiologists, and has been made a subject of much discussion. Theories have been advanced, experiments on animals have been performed, symptoms have been noted, and pathological observations have been made by various individuals with the express object of determining this interesting question, and it still remains a matter of speculation and of investigation.

Three different functions have been attributed to the cerebellum by as many classes of writers.

One class maintain the doctrine that this organ is the regulator of the movements of locomotion; a second, that it is the centre and source of sensation; and a third, that it is the organ of the instinct of reproduction.

The advocates of each of these theories will read the following details with some degree of interest, and the followers of the founder of the new theory of cerebral physiology, and of mental philosophy will not fail to summon some of them as proofs of their adopted doctrine.

Case I. *Pneumonia. Absence of Testes. Cerebellum of small size.* D. O, ætat. 45, book-keeper, intemperate. Health gradually declining for two years; has had derangement of digestive organs with organic disease of liver. First seen a few hours before death; was lying on sofa; skin yellow, pulse quick, small; respiration short and frequent, accompanied with cough, and an expectoration of dark thick fœtid sputa; thorax superficially examined, gave usual resonance on left side; on right from clavicle to nipple flat, below quite natural; respiration audible in left lung, front; in right, vesicular murmur could not be heard from clavicle to near nipple, but was replaced by bronchial respiration and mucous ronchus; in lower part respiration distinct with fine mucous or crepitious ronchus, resonance of voice loud and sharp, sound seeming to be immediately against the ear; rest of chest not examined, the intention being to re-examine the whole carefully at next visit. Expec-